

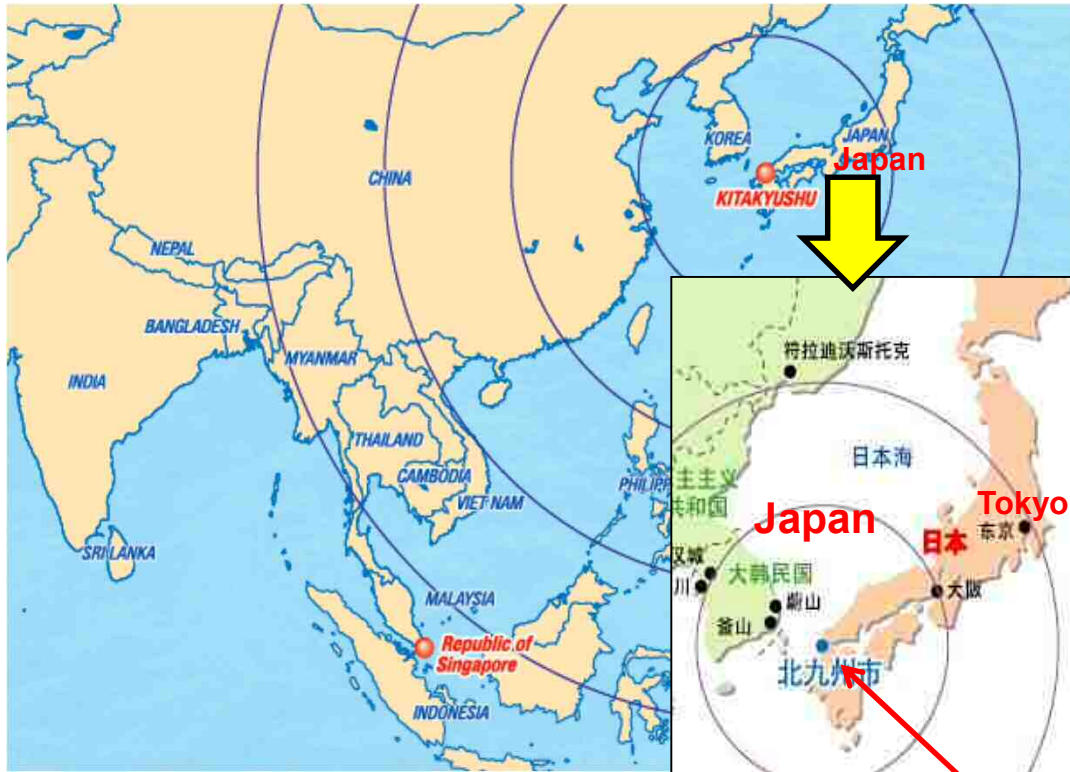


Activities for E-Waste Recycling in Vietnam and the Philippines

**Kitakyushu Asian Center
for Low Carbon Society
City of Kitakyushu**



City located near to other Asian nations, rich in nature, and developed as a manufacturing area



■ Kitakyushu City
 Population: 977,000 (2010) Area: 487.88 Km²
 GDP: 3,430 billion yen (2010)

Kitakyushu City

Rich nature and branded food materials



Karst Plateau Hiraodai



Wakamatsuhoku Beach



Ouma Bamboo Shoots



Kanmon Straits Octopuses



Kokura Beef



Buzen-Sea Oysters



Wakamatsu Special Tomatoes

Major companies in Kitakyushu area



Nippon Steel Corporation



Yaskawa Electric Corporation



TOTO Ltd.



Mitsubishi Chemical Corporation

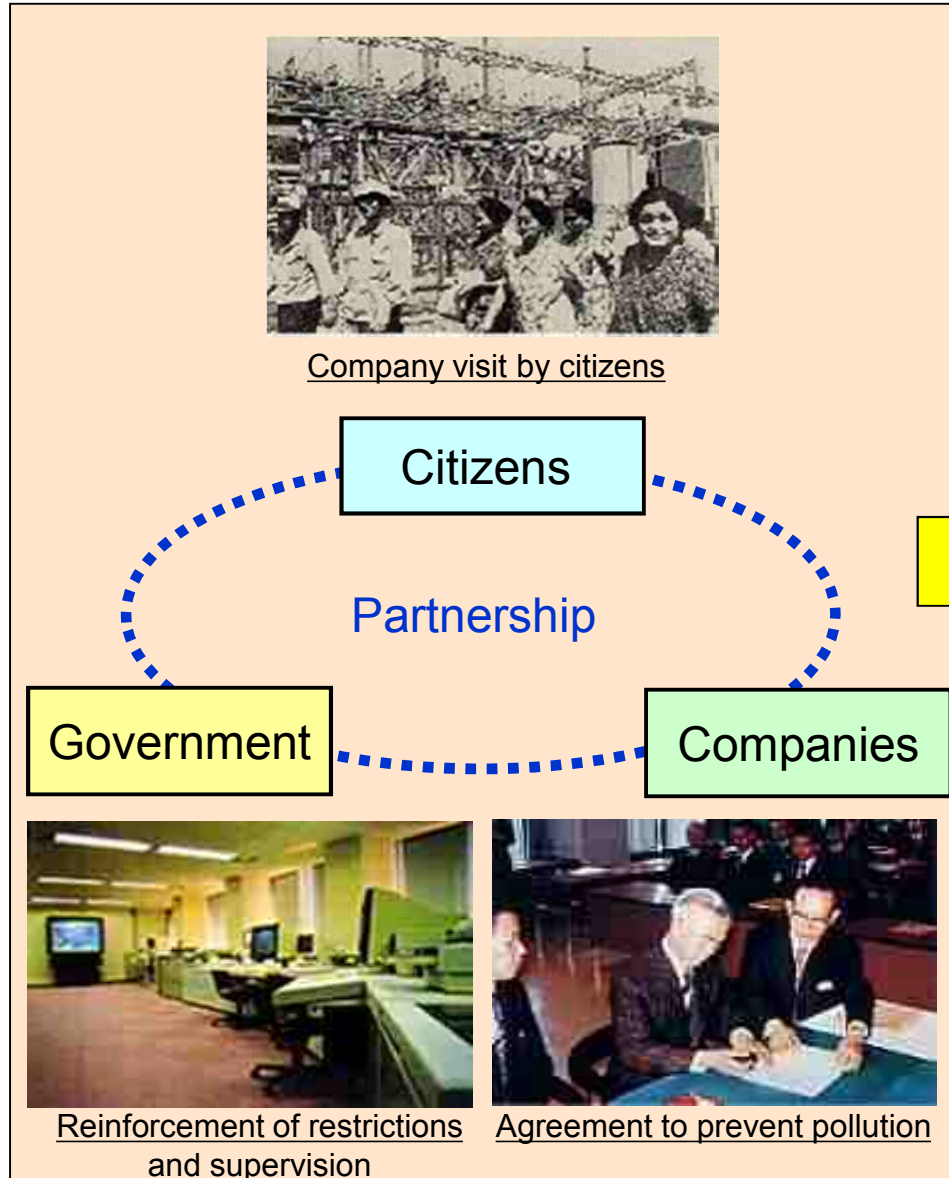


Toyota Motor Corporation · Nissan Motor Co., Ltd.



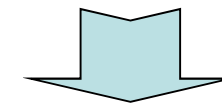
Mitsubishi Materials Corporation

Regional resources (Experience with overcoming pollution problems) (1)



Kitakyushu City with recovered environments

1960s



Present



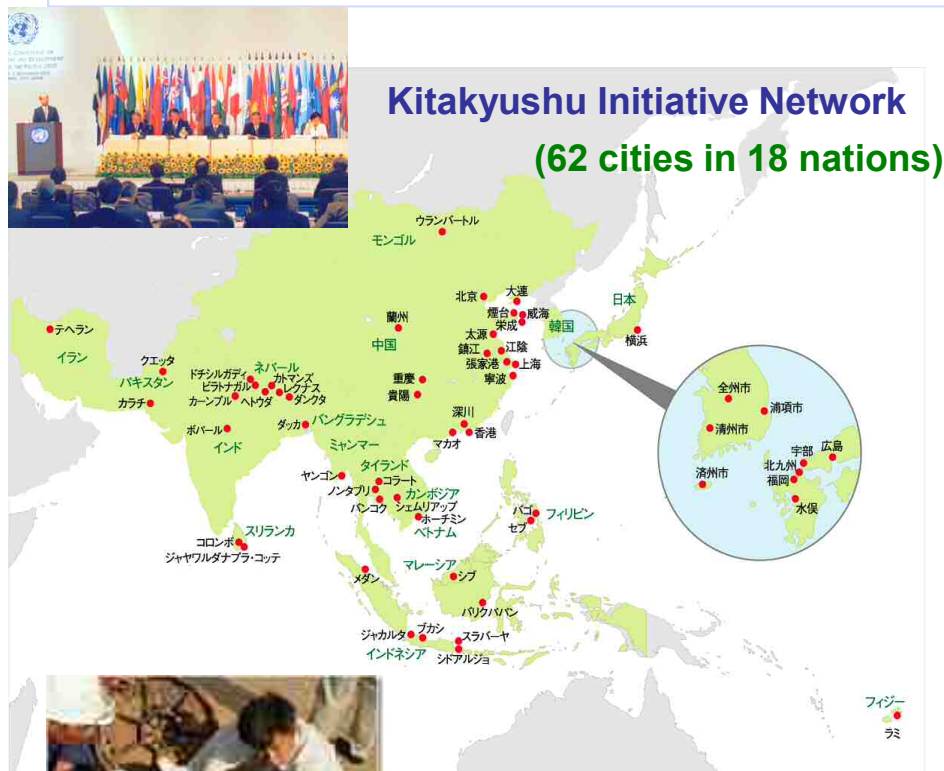
Solution of pollution problems is a starting point for international cooperation on environmental issues.

Transferring the experience of overcoming pollution problems so that developing nations need not repeat the same mistake

Regional resources (Development of international cooperation on environmental issues) (2)

Partnership with other Asian nations for mutual prosperity

Received trainees: 7,453 persons from 150 nations; Dispatched specialists: 175 persons to 25 nations
 Promotion of cooperation networking between Asian cities and environmental improvement projects : 67 projects



Contribution to environmental improvements in Dalian, China
 (Dalian City received the Global 500 Award in 2001.)



Exchanged memorandum for cooperation on eco-town with Tianjin City
 (At the Prime Minister's official residence)



Water supply project at Phnom Penh



Air pollution survey in Mongolia

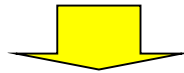


Driving forward the waste composting project with Surabaya City, Indonesia
 (Adopted by over 20,000 families)

Kitakyushu Asian Center for Low Carbon Society

Kitakyushu City was selected as Eco-Model City in 2008
*CO2 reduction: -200%(50% in domestic, 150% in overseas) by 2050
based on CO2 emission in 2005*

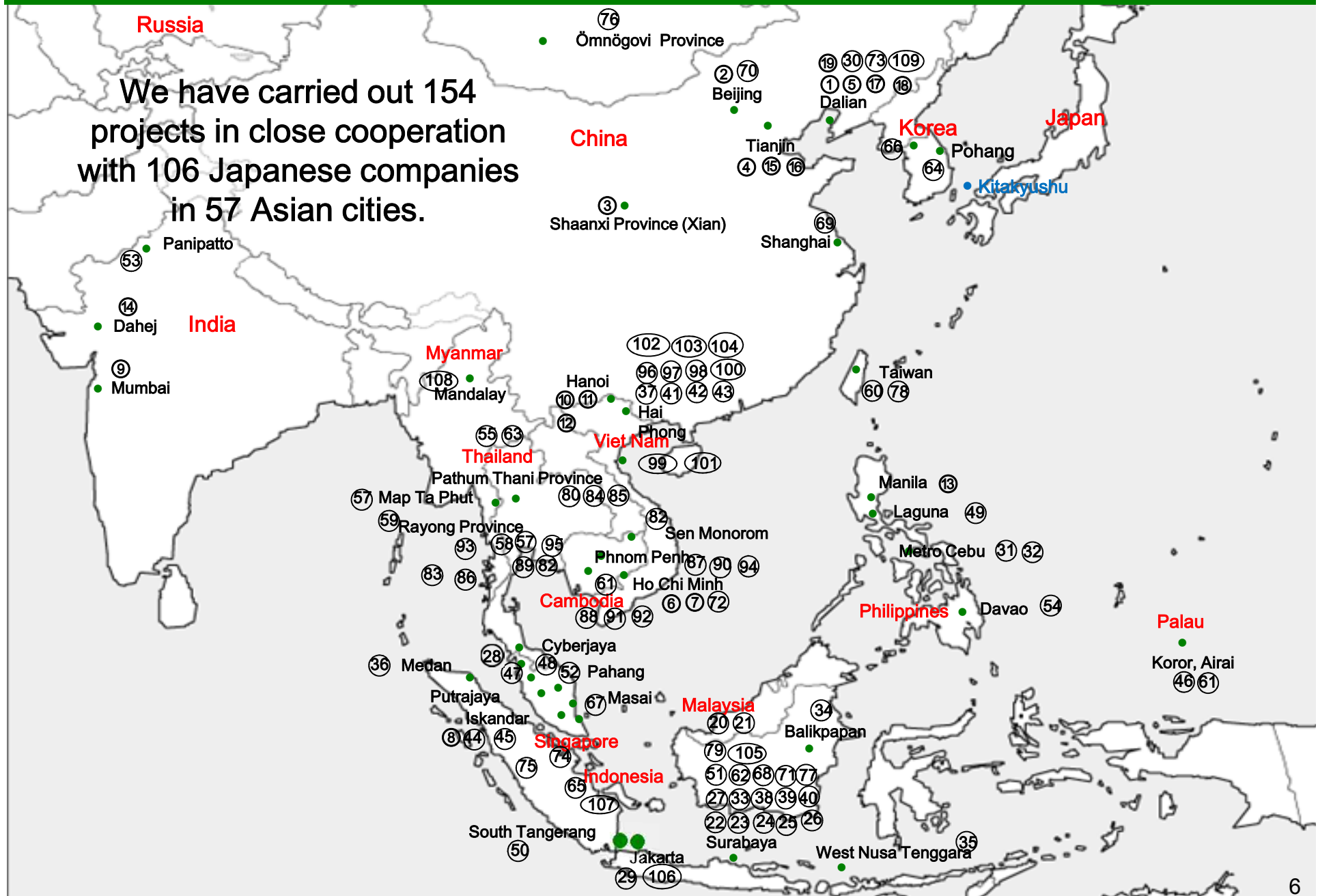
Utilization of the environmental technologies developed through the solution of pollution problems and manufacturing processes, and the City to City network established by international cooperation in the past



Kitakyushu Asian Center for Low Carbon Society opened in June 2010
“Changing the approach from environment cooperation to environment business”

Diverse Project Development Map

We have carried out 154 projects in close cooperation with 106 Japanese companies in 57 Asian cities.



Sister City with Haiphong City in Vietnam

Sister City Agreement (April in 2014)



“Green Growth Promotion Plan” of the City of Hai Phong



The Chairman of Hai Phong City received this plan from the Mayor of Kitakyushu in May 2015

15 Pilot Projects

Waste	(1) Separation and composting of household waste
	(2) Waste heat recovery power generation system in cement factory and production of raw materials for cement from waste
	(3) E-Waste recycling
Energy	(4) Promotion of energy savings for factories and buildings etc.
Transportation	(5) Introduction of low-emission buses
	(6) Promote use of public transportation
Cat Ba island	(7) Development of comprehensive resource recycling system
	(8) Energy savings, introduction of renewable energy and introduction of EV buses in remote island
	(9) U-BCF expansion
Water, sewage, and storm water drainage	(10) Handicraft village wastewater measures
	(11) Introduction of sewerage registry system
	(12) Restoration of Tay Nam canal
Environmental conservation	(13) Development of air and noise monitoring systems
	(14) Installation of high-efficiency electric furnaces in foundries
Green Production	(15) Promotion of green agriculture



Waste separation work



Solar power generation system



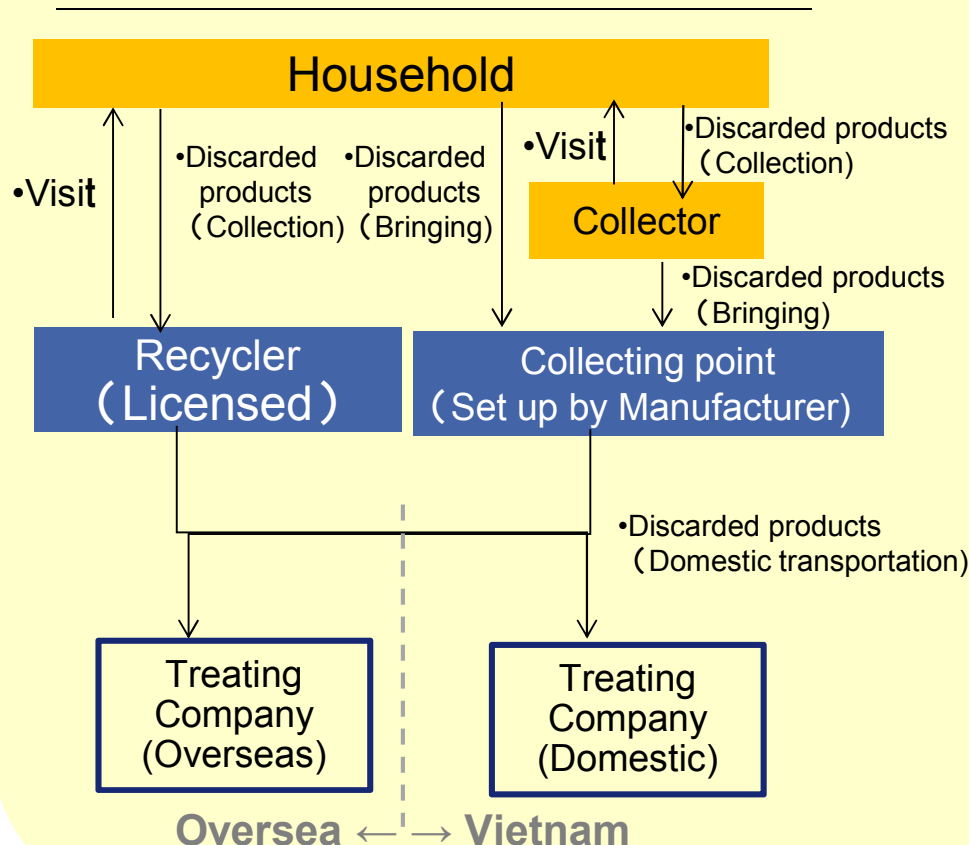
EV bus

E-Waste Recycling Pilot Project in Haiphong City

Ministry of Natural Resource and Environment (MONRE) proclaim The Decision No.16 “Regulating the take- back and treatment of discarded products” on May 22nd, 2015

Collecting discarded products is allowed only for manufacturer and licensed recycler.

Overall of Decision16



Regulating the take – back and treatment of discarded products

Article 4 The process of collecting and treating of discarded products

1. Collecting process of discarded products included;
 - a) Setting up collection points for discarded products
 - b) Receiving discarded products at the collection points
 - c) Transporting discarded products from the collection point to the treating entity
 - d) Transferring discarded products to treating enterprises
2. Treating process of discarded products include;
 - a) Sorting of discarded products
 - b) Reuse of discarded products
 - c) Recycling of discarded products
 - d) Destruction of discarded products
3. Collection, treatment of discarded products must comply with technical standards on environmental protection and statutory regulations on waste management.

E-Waste Recycling Pilot Project in Haiphong City

Pilot project of discarded mobile phone recycling



Translation:
Pilot project
on discarded
mobile phone
collection!!



Distributed flyer



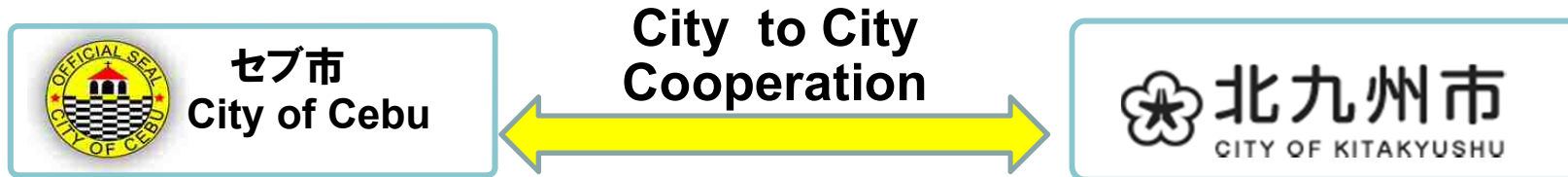
Announcing objective, background and how to collect the discarded mobile phone by speaker twice a day (AM 7:00 and PM 5:00)

Introducing this pilot project through the Local TV news show



Bringing discarded mobile phone in designated collection point

Cooperation for E-Waste Recycling with Cebu City in the Philippines



History of Cooperation between City of Cebu and Kitakyushu

- 1997 Asian City Network for Environmental Cooperation
- 1999 Capacity building for government officer on environmental management (JICA)
- 2000 ~ 2010 Cleaner Production, Solid Waste Management (Transferring used garbage trucks), Water Pollution in the rivers,
- 2010 ~ 2012 Improving Waste Management System (Takakura compost)

“No segregation and No collection”

“ Realizing 30% reduction of waste to landfill site”



2015 Mayor's Special Award



Cooperation for E-Waste Recycling with Cebu City in the Philippines

01 New E-waste Control Regulation DAO 2013-22 by DENR

- ◆ DENR issued a new administrative order DAO 2013-22 to regulate E-waste in the end of 2013, and launched tightening of regulations related to E-waste handling in Philippines.

Outline of DAO2013-22 (related to E-waste)

- In this regulation, the waste number for E-waste, M506 and M507, are set, and also license for transportation and TSD (Treatment, Storage, Disposal) are set more particularly. (* Conventionally, waste number only for E-waste didn't exist.)

Waste No.	Object	Outline
M506	<ul style="list-style-type: none"> •E-waste from industrial field such as IT-BPM and fast food chain 	<ul style="list-style-type: none"> •All waste electrical and electronic equipment that contain hazardous components such as lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl esters (PBDEs)
M507	<ul style="list-style-type: none"> •E-waste from households, small-scale commercial facilities, schools, medical facilities, etc. 	<ul style="list-style-type: none"> •Refrigerators, washing machines, air conditioners, batteries, busted lamps, etc.

- Regarding E-waste M507, which is from households and small-scale commercial facilities, it is requested local administration to consolidate them through MRF (Material Recovery Facilities).
- IT-BPM companies, which were not obligated to register conventionally, are compelled to register as hazardous waste generators, in order to promote building system aiming at proper treatment of E-waste such as waste PCs.

Cooperation for E-Waste Recycling with Cebu City in the Philippines

Supporting Cebu City's Ordinance since 2014 (supported by METI, Japan)

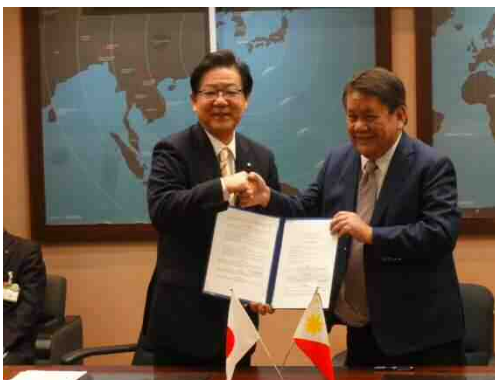
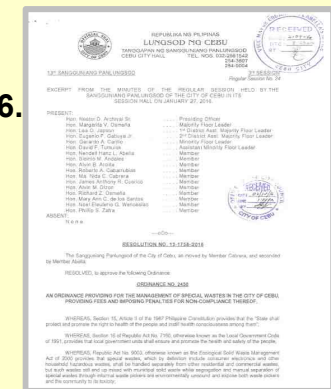


Ordinance No. 2450

“AN ORDINANCE PROVIDING FOR THE MANAGEMENT OF SPECIAL WASTES IN THE CITY OF CEBU, PROVIDING FEES AND IMPOSING PENALTIES FOR NON-COMPLIANCE THEROF” in 2016.

[Extract]

- This ordinance obligates household and commercial facilities must bring special wastes including E-waste to collection points designated by Barangay.
- All transporter and TSD facilities operating within the City must register with the Cebu City Solid Waste management Board with requirement of DENR-EMB accreditation, Business permit.
- Any person found guilty of violating any prohibited Acts should be imposed fine for first and second offence. For the third business license shall be suspended .



Memorandum of Understanding for Environmental Technical Cooperation in February 9th in 2017

Article1 Objective

The objective of this MoU is to establish an Environmental Technical Cooperation in order to promote and expand effective and mutually beneficial cooperation in the development of the two cities.

Article2 Scope

Promotion of resource recycling by proceeding with the management of special waste
 Development of a green economy and environment conservation with pollution control of water, air and soil.

Thank you for your attention



My name is **Teitan**.

I came from North Pole.

Global warming causes melting ice there, and we have less and less places to live every day.

So I came to Environmental model city, Kitakyushu to protect my family and North Pole.

I am hoping that we all learn the importance of Environmental and ecology more, so that we will be able to stop the global warming together!

Kitakyushu City Environmental Mascot Character

Teitan

低炭素 (teitanso) = Low Carbon



Teitan